

California Air Resources Board

Staff Proposal on Greenhouse Gas Thresholds of Significance under CEQA *Potential Performance Standards and Measures*

December 9, 2008

Background

- AB 32 & Executive Order S-03-05
- SB 97
 - OPR tasked with updating CEQA guidelines for GHGs by early 2009
 - OPR asked ARB to recommend a method for setting GHG-related significance thresholds
- October release of preliminary draft proposal for interim thresholds

Overview - Preliminary Draft Proposal

- Residential and Commercial Projects
 - Performance standards for construction, energy, water, waste and transportation
 - Upper limit on project emissions
- Industrial Projects
 - Quantitative standard of 7,000 MTCO₂e/yr for operational emissions
 - Performance standard for construction

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Process Highlights

- Focus today on performance standards for residential and commercial projects
- Staff working on overall framework in response to comments
- December 19 release of next draft proposal
 - Framework, thresholds and application analysis
- Third workshop early January
- Board meeting January 22, 2009

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Context


- Global, cumulative pollutant
- Project-by-project CEQA approach
- Distinct AB 32 and CEQA statutes
- Lead agencies implement CEQA

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ARB Staff's Overall Approach

- Stringent non-zero thresholds
- Apply sector-by-sector approach
- Encourage lead agencies to include lifecycle emissions where appropriate
- ARB recommendation is interim
- Lead agencies retain existing authority on thresholds

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Residential and Commercial Projects

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Developing Performance Standards and Measures

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Sources

- Staff surveyed performance standards and best management practices in:
 - Green building rating systems
 - California Green Building Code
 - Incentive programs
 - CEQA exemption in SB375

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Green Building Rating Systems

- Leadership in Energy and Environmental Design:
 - New Construction
 - Existing Buildings
 - Neighborhood Development
 - Homes
 - Schools
- Collaborative for High Performance Schools
- California Green Builder Program
- Green Point Rated Single and Multifamily Homes

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Incentive Programs

- Federal Transit Administration
 - New Starts Program
- CA Housing and Community Development
 - Transit Oriented Development Housing Program
- CA Energy Commission
 - SB 1 Solar Electric Incentive Programs

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Application of Performance Standards and Measures

- Project would meet all interim performance standards for:
 - Energy
 - Waste
 - Transportation
 - Water
 - Construction
- Project with mitigation may demonstrate an equivalent level of GHG emission reductions

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Potential Performance Standards and Measures

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Construction

- Provide alternative transportation mode options or incentives for workers to and from worksite on days that construction requires 200 or more workers; AND
- Recycle and/or salvage at least 75% of non-hazardous construction and demolition debris by weight (residential) or by weight or volume (commercial); AND

Potential Performance Standards and Measures

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Construction, cont.

- Use recycled materials for at least 20% of construction materials
 - Based on cost for building materials
 - Based on volume for roadway, parking lot, sidewalk and curb materials
 - Recycled materials may include: salvaged, reused, and recycled content materials

Potential Performance Standards and Measures

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Energy

- Meet CEC's voluntary Tier II Energy Efficiency standards in effect at time building construction begins
 - Source: Standards to qualify for solar energy incentive programs
 - Currently 30% reduction in combined space heating, cooling and water heating energy compared to 2008 Title 24 Standards

Potential Performance Standards and Measures

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Water

- Reduce indoor potable water use by at least 20%
- Reduce outdoor potable water use for landscape irrigation by at least 50%

Benchmark for comparison: water use levels projected by application of methodology in California Green Building Code, Section 603.2 (for indoor) and 604.2 (for outdoor)

Potential Performance Standards and Measures

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Waste

- Where local recycling and/or composting programs exist:
 - Design facilities and structures to encourage participation in program; AND
 - Install adequate, accessible recycling and composting receptacles in common or public areas; AND
 - Provide easy access to central recycling and composting receptacles or collections areas

Potential Performance Standards and Measures

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Residential Transportation

- Demonstrate that average vehicle miles traveled per household per year (VMT/hh-yr) is projected not to exceed 14,000 VMT/hh-yr
- Represents carbon-efficient, compact development with close proximity to transit and variety of services

Potential Performance Standards and Measures

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Commercial Transportation

- Meet the following proximity and design elements:
 - ½ mile of residential zone or neighborhood with average density of at least 10du/net acre; AND
 - ½ mile of at least 10 neighborhood services; AND
 - Pedestrian access between project and services; AND

Potential Performance Standards and Measures

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Commercial Transportation, cont.

- Institute comprehensive transportation demand management (TDM) program to reduce employee trips by at least 20%

Potential Performance Standards and Measures

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Analysis of Representative Projects

- Impacts on all sub-sources, except waste
- Six residential projects
 - Single and multifamily, some with local serving retail and transit, density of 3-38 units/acre
 - Size: 45 - 14,000 dwelling units
- Six commercial projects
 - Distribution center, business park, discount superstore, medical office, office tower, school
 - Size: 100,000 – 5,000,000 sq ft

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Emission Reductions by Project

- Application of performance standards and measures resulted in emission reductions of:
 - Residential: 20 – 50%
 - Commercial: 7 – 15%

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Next Steps

Schedule

- Dec 9: Performance standards/measures and initial results
- Dec 16: Comments due on draft performance standards/measures
- Dec 19: Updated Draft Recommendation
- Jan 6: 3rd Public Workshop
Comments due on updated Draft
- Jan 12: Draft Recommendation for Board
- Jan 22: ARB Board Meeting

Contacts

Project Website:

<http://www.arb.ca.gov/cc/localgov/ceqa/ceqa.htm>

Online Comments:

<http://www.arb.ca.gov/cc/localgov/ceqa/ceqacomm.htm>